Amendment to the Claims:

This listing of claims replaces all prior versions, and listings, of claims in the application:

1. (Currently Amended) A ~~methanol concentration sensor device~~fuel cell system, comprising:

a fuel cell stack comprising an anode, a cathode, and ~~an electrolyte element, including electrical connections thereto, and adapted to be maintained in a methanol solution;~~

~~a source of electrical power; and~~

~~a meter, connected to said source of electrical power, and measuring an amount of current flowing from said source, representing a concentration of methanol in the methanol solution.~~ a solid polymer electrolyte membrane between said anode and cathode, said anode and cathode being each in contact with fluid, wherein the fluid in contact with said anode includes a methanol fuel which is substantially free of acid electrolyte; and

a turbine, driven by pressure of one of said fluids, and recycling pressure in said one of said fluids.

2. (New) A fuel cell system as in claim 1, wherein said anode is in contact with pressurized gas, and said turbine is driven by said pressurized gas.

3. (New) A fuel cell system as in claim 1, further comprising an air compressor, driven by said turbine, and recycling pressure, driving said turbine.

4. (New) A fuel cell system as in claim 1, wherein said polymer electrolyte membrane is a proton conducting, solid polymer electrolyte membrane.

5. (New) A fuel cell system as in claim 1, wherein said anode includes an electrochemical catalyst thereon.

6. (New) A liquid feed direct oxidation organic fuel cell, comprising:

a fuel cell stack formed of an anode, including an electrochemical catalyst thereon, a proton conducting solid polymer electrolyte membrane, coupled to said anode, and a cathode, coupled to another side of said proton conducting solid polymer electrolyte membrane, said fuel cell stack capable of oxidizing methanol without free soluble acid or base electrolytes; and

a pressure recycling device, operating to recycle pressure in at least one fluid which is in contact with said fuel cell stack.

7. (New) A fuel cell as in claim 6, wherein said pressure recycling device includes a turbine.

8. (New) A fuel cell as in claim 6, wherein said pressure recycling device includes an expander.

9. (New) A fuel cell as in claim 6, wherein said pressure recycling device is coupled to gases in contact with said anode.

10. (New) A fuel cell as in claim 9, further comprising a water/air separator, also coupled to gases in contact with said

anode, operating to separate air from water.

11. (New) A fuel cell as in claim 10, further comprising a water recycling part, which feeds back water from the water/air separator to be reused in subsequent reactions.

12. (New) A fuel cell as in claim 11, further comprising a vent, allowing excess water to be removed.

13. (New) A fuel cell as in claim 6, further comprising a water recycling part, operating to recycle water from a cathode back to an anode.

14. (New) A fuel cell as in claim 13, further comprising a vent for excess water.

15. (New) A fuel cell as in claim 14, further comprising a controller, which monitors an amount of water in the system, and controls said vent for excess water to remove water when too much water is being recirculated.

16. (New) A fuel cell as in claim 6, further comprising at least one fan, driven by said pressure recycling device.

17. (New) A fuel cell as in claim 16, further comprising at least one pump, operating to pump methanol.

18. (New) A fuel cell system, comprising:

a fuel cell stack, including an anode, a cathode, and a proton conducting solid polymer membrane, connected between said anode and cathode, and connected thereto, wherein said anode is

formed with an electrochemical catalyst, and a proton conducting material therein, and also being electrically conducting, and said cathode formed of a gas diffusion material which allows diffusion of gas;

a fluid feed system including a methanol source, in contact with said fuel cell stack, and providing methanol to said fuel cell stack, which methanol is substantially free of any free acid electrolytes therein, and a gas source, providing gas to said cathode for an electrochemical reaction; and

a pressure device, coupled to said fluid feed system, and using pressure from said fluid in said fluid feed system in another system.

19. (New) A system as in claim 18, wherein said pressure device includes a turbine driven from pressure from said fluid feed system.

20. (New) A system as in claim 19, wherein said turbine is coupled to said gas source part of said fluid feed system.

21. (New) A system as in claim 18, wherein said pressure device is coupled to said gas source part of said fluid feed system.

22. (New) A system as in claim 18, further comprising a gas/liquid separator, coupled to said gas source part of said fluid feed system.

23. (New) A system as in claim 22, further comprising a water recycling part, feeding back liquid from said gas/liquid separator.

24. (New) A system as in claim 18, further comprising a pressure driven device, driven to receive its pressure from said pressure device.

25. (New) A system as in claim 24, wherein said pressure driven device includes a fan.

26. (New) A method, comprising:

operating a direct fed methanol fuel cell which operates with an organic alcohol containing fuel; and

using a pressure from one portion in said fuel cell to drive pressure-driven device.

27. (New) A method as in claim 26, wherein said using comprises using said pressure to drive another portion of the fuel cell.

28. (New) A method as in claim 26, wherein said one portion of the fuel cell is in contact with fluid used within the fuel cell.

29. (New) A method as in claim 28, wherein said one portion of the fuel cell is in contact with a gas supply to the cathode.

30. (New) A method as in claim 27, wherein said another portion of the fuel cell includes a fan driven by recycled pressure.

31. (New) A method as in claim 26, further comprising

using the pressure to carry out another operation in the fuel cell.

32. (New) A method as in claim 26, wherein said operating comprises carrying out an electrochemical reaction on the methanol fuel cell using a methanol fuel which is substantially free of free acid– electrolytes.

33. (New) A method, comprising:

supplying fluids to a direct fed methanol fuel cell stack, which includes an anode, a cathode, and a proton conducting solid polymer electrolyte membrane between said anode and cathode;

carrying out an electrochemical reaction using fluids; and

recovering pressure from the fluids fed by said supplying.

34. (New) A method as in claim 33, wherein said recovering pressure comprises using pressure from said fluids to carry out another operation in said fuel cell.

35. (New) A method as in claim 34, wherein said recovering pressure comprises using pressure from said fluids to drive a fan.

36. (New) A method as in claim 33, further comprising recovering fluids after the electrochemical reaction has been carried out, so that at least part of the fluids after the electrochemical reaction are fed back for a subsequent electrochemical reaction.

37. (New) A method as in claim 33, wherein said recovering

pressure comprises using the pressure to drive a turbine.

38. (New) A fuel cell system, comprising:

a fuel cell stack, including an anode, a cathode, and a proton conducting solid polymer membrane, connected between said anode and cathode, and connected thereto, wherein said anode is formed with an electrochemical catalyst, and a proton conducting material therein, and also electrically conducting, and said cathode is formed of a gas diffusion material which allows diffusion of gas therein;

a fluid feed system including a methanol source, in contact with said fuel cell stack, and providing methanol to said fuel cell stack, which methanol is substantially free of any free acid electrolytes therein, and a gas source, providing gas to said cathode for an electrochemical reaction; and

a fluid recycling device, coupled to said fluid feed system, and receiving a fluid after reaction with the cathode, and recycling part of said fluid back to the anode.

39. (New) A fuel cell system as in claim 38, further comprising a liquid/gas separator, separating liquid parts of the recycled fuel from gas parts of the recycled fuel.

40. (New) A fuel cell system as in claim 39, wherein said liquid parts of the recycled fuel are fed back to the anode.

41. (New) A fuel cell system as in claim 38, further comprising a valve, which vents excess water if too much water has been recycled.

42. (New) A fuel cell system as in claim 38, further

comprising a pressure recycling system, in contact with said fluid feed system, and operating to recycle pressure within the fluid feed system by receiving pressure therefrom, and providing recycling pressure to carry out another operation in the fuel cell.